

ABSTRACT

A method of etching prevents micro trenching without using an etch stop. Organic film on a wafer (W) placed in a hermetically sealed process chamber filled with process gas is etched. The gas includes N_2 and H_2 , and the pressure in the process chamber is substantially 500-800 mTorr. When the process gas includes at least nitrogen atoms and hydrogen atoms under a pressure substantially higher than 500 mTorr in the process chamber, micro trenching can be prevented without using an etch stop. Mask selectivity is also improved.